

Student Details	
Div :-	
Roll No :-	
Name :-	
Batch :-	

DSA Problem Statement Topic Wise (Including Leetcode Statement)

Date:- 03/11/25

Topic	Pbm No	Programming Statement	Leetcode Pbm No	Solved /Unsolved
Recursive Function	1	1. Factorial of given no		<input type="checkbox"/>
	2	2. Find out fibonacci series	509	<input type="checkbox"/>
	3	3. Check given no it is power of two or not	231	<input type="checkbox"/>
	4	4. Check given no it is power of four or not	342	<input type="checkbox"/>
	5	5. Find out trailing zeroes in factorial	172	<input type="checkbox"/>
	6	6. Find Kth character in string game -I	3304	<input type="checkbox"/>
Array	7	1. Initialize and display the array elements		<input type="checkbox"/>
	8	2. Search an element by using linear search		<input type="checkbox"/>
	9	3. Sorting using bubble sort		<input type="checkbox"/>
	10	4. Sorting using Insertion sort		<input type="checkbox"/>
	11	5. Sorting using Selection sort		<input type="checkbox"/>
	12	6. Find the largest/smallest ele from given array	215	<input type="checkbox"/>
	13	7. Check given array is sorted or not		<input type="checkbox"/>
	14	8. Remove the duplicate ele from sorted array	26	<input type="checkbox"/>
	15	9. Find out second largest and smallest element from the array	215	<input type="checkbox"/>
	16	10. Sorting array elements using Merge Sort		<input type="checkbox"/>
	17	11. Shifting array element to left by 1 position		<input type="checkbox"/>
	18	12. Search element using binary search		<input type="checkbox"/>
	19	13. Find out the majority element from the array The majority element is the element that appears more than $\frac{n}{2}$ times.	169	<input type="checkbox"/>
	20	14. Move zero's Given an integer array nums, move all 0's to the end of it while maintaining the relative order of the non-zero elements.	283	<input type="checkbox"/>
	21	15. Find the missing number in array	268	<input type="checkbox"/>
	22	16. Count Maximum Consecutive One's in the array	485	<input type="checkbox"/>
	23	17. Two Sum : Check if a pair with given sum exists in Array	1	<input type="checkbox"/>
	24	Plus One Problem	66	<input type="checkbox"/>
	25	Merge Sorted Array	88	<input type="checkbox"/>
	26	Intersection of two array	349	<input type="checkbox"/>
	27	Relative Rank	506	<input type="checkbox"/>
2 D Array	28	1. Row with maximum ones	2643	<input type="checkbox"/>
	29	2. Find the row index that has max sum of element		<input type="checkbox"/>
	30	3. Return the column index that has max sum of ele		<input type="checkbox"/>
	31	4. Return the column index that has maximum even no		<input type="checkbox"/>
	32	5. Searching element in the 2D matrix		<input type="checkbox"/>
	33	6. Search an element in 2D matrix with $O(\log(n*m))$ complexity	74	<input type="checkbox"/>
	34	7. Search in 2D matrix II	240	<input type="checkbox"/>
	35	Island Perimeter	463	<input type="checkbox"/>
String	36	1. Display the string value char by char		<input type="checkbox"/>
	37	2. Display the string in reverse order char wise		<input type="checkbox"/>
	38	3. Display the string in reverse order word wise		<input type="checkbox"/>
	39	4. Find out the how many times char are occurred of the given string		<input type="checkbox"/>

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String	40	5. Find out the which char occurred maximum in given string		<input type="checkbox"/>
	41	6. Find out the no of vowels and consonant from the given string		<input type="checkbox"/>
	42	7. Check the given string is palindrome or not		<input type="checkbox"/>
Stack & Queue	43	1. Implement the stack using array		<input type="checkbox"/>
	44	2. Implement the queue using array		<input type="checkbox"/>
	45	3. Valid Parentheses	20	<input type="checkbox"/>
	46	4. Baseball Game	682	<input type="checkbox"/>
	47	5. Next Greater Element II	503	<input type="checkbox"/>
Linked List	48	Create a Single linked list and perform the following operation 1.Insert a node at first 2. Insert a node at last 3. Insert a node anywhere 4. Delete a first node 5. Delete last node 6. Delete any node 7. Display 8. Search		<input type="checkbox"/>
	49	2. Check given SLL is palindrome or not (using Stack)	234	<input type="checkbox"/>
	50	3. Find out the middle node of the linked list (two pointer technique)	876	<input type="checkbox"/>
	51	4. Reverse Linked List (three pointer technique)	206	<input type="checkbox"/>
	52	5. Find out the intersection of linked list	160	<input type="checkbox"/>
	53	6. Convert binary number in a linked to integer	1290	<input type="checkbox"/>
	54	1. Binary Tree Implementation		<input type="checkbox"/>
	55	2. Tree Traversing Preorder	144	<input type="checkbox"/>
	56	3. Tree Traversing Inorder	94	<input type="checkbox"/>
	57	4. Tree Traversing Postorder	145	<input type="checkbox"/>
Tree	58	5. Tree is Symmetric or not	101	<input type="checkbox"/>
	59	6. Maximum depth of binary tree	104	<input type="checkbox"/>
	60	7. Path sum	112	<input type="checkbox"/>
	61	8. Sum of left leaves	404	<input type="checkbox"/>
	62	9. Diameter of binary tree	543	<input type="checkbox"/>
	63	10. Minimum number game	2974	<input type="checkbox"/>
	64	11. Creation and Insert BST		<input type="checkbox"/>
	65	12. Validate binary search tree	98	<input type="checkbox"/>
	66	13. Find out min and max ele from BST		<input type="checkbox"/>
	67	14. Find out inorder predecessor and successor in BST		<input type="checkbox"/>
	68	15. Search element in BST	704	<input type="checkbox"/>
	69	16. Convert sorted array to binary search tree	108	<input type="checkbox"/>
	70	17. Increasing order search tree (Inorder traversing)	897	<input type="checkbox"/>
	71	1. Create a Graph (insert a vertex and connect a network)		<input type="checkbox"/>
	72	2. Traversing in Graph using BFS (queue)		<input type="checkbox"/>
	73	3. Traversing in Graph using DFS (stack)		<input type="checkbox"/>
	74	4. Maximum depth of binary tree (DFS)	104	<input type="checkbox"/>
Graph	75	5. Flood Fill Level Wise (BFS)	733	<input type="checkbox"/>
	76	6. Find the center of star graph	1791	<input type="checkbox"/>
	77	7. Find if path exists in graph	1971	<input type="checkbox"/>
	78	8. Find the minimum spanning tree using (using prims algo)		<input type="checkbox"/>

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	79	9. Find the MST using Krushkal algorithm		<input type="checkbox"/>
	80	10. Find the shortest distance path using Dijkstra Algorithms		<input type="checkbox"/>
Dynamic Program	81	1. Fibonacci Series using DP (Memoization)		<input type="checkbox"/>
	82	2. Fibonacci Series using DP (Tabulation)		<input type="checkbox"/>
	83	3. Solve the 0/1 knapsack problem using recursive		<input type="checkbox"/>
	84	3. Solve the 0/1 knapsack problem using memoization		<input type="checkbox"/>
	85	4. Solve the 0/1 knapsack problem using tabulation		<input type="checkbox"/>
	86	5. Find out the LCS using recursive	1143	<input type="checkbox"/>
	87	6. Find out the LCS using momoization	1143	<input type="checkbox"/>
	88	7. Find out the LCS using tabulation	1143	<input type="checkbox"/>
	89	8. Find out the LIS using recursive	300	<input type="checkbox"/>
	90	9. find out the LIS using momization	300	<input type="checkbox"/>
	91	10. Find out the LIS using tabulation	300	<input type="checkbox"/>
Total Leetcode Pbm Statement			52	

Student Name & Sign

Subject Teacher and Sign